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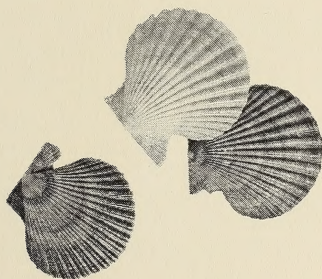
## Mathematics

### Module 2

# Working with Big Numbers



Home Instructor's Guide: Days 10–18  
and  
Assignment Booklet 2B



Learning  
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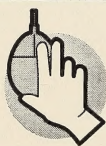
**Alberta**  
LEARNING





Grade Two Mathematics  
 Module 2: Working with Big Numbers  
 Home Instructor's Guide: Days 10–18 and Assignment Booklet 2B  
 Learning Technologies Branch  
 ISBN 0-7741-1975-6

This document is intended for	
Students	✓
Teachers	✓
Administrators	
Home Instructors	✓
General Public	
Other	



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## Module 2: Working with Big Numbers

### Daily Summary

#### Day 10

The student will be building and drawing numbers. This further reinforces the meaning of numbers to the student.

#### Day 10: Lesson 1

##### Answers

- 94
  - 7 tens 24 ones
- The student should use fewer tens and more ones.
- The student should use more tens and fewer ones.

#### Day 10: Lesson 2

##### Answers

- 84
  - 7 tens 14 ones
  - The student should use more tens and fewer ones.
  - The student should use fewer tens and more ones.
- 53
  - 4 tens 13 ones
  - The student should use more tens and fewer ones.
  - The student should use fewer tens and more ones.

Have the student do the assignment for Day 10 after completing the day's lessons.



## Day 11

### Day 11: Lesson 1

The student will be estimating and measuring him or herself with interlocking cubes.

After the student makes an estimate, take that number of cubes and link them. Add or take away cubes until they match the student's height. Have the student lie down and place the cubes beside him or her, or hold them up if the student is standing.

When locking the cubes together, link one colour for each ten made. It will be easy to count the cubes by ten this way. This will reinforce counting by tens as the student will see how easy it is to count larger numbers when they are grouped by ten.

There are extension activities for Day 11.

## Day 12

Rounding is the focus of this day's lessons. It is an important skill, as it integrates using place value and numbers with understanding approximate values.

### Day 12: Lesson 1

Discuss the number of people attending the birthday party and why a rounded number is sometimes easier to plan with than the exact number. Ask the student for some reasons why this might be so.

Explain to the student that sometimes numbers are rounded because the exact number isn't known. For example, you cannot always tell how many hot dogs a guest will eat or whether someone might become ill and not attend the party. Using rounded numbers can make planning easier.

Think of other examples with the student where rounding would be easier and more convenient.

### Answers

- |           |        |
|-----------|--------|
| 1. a. 40  | b. 40  |
| 2. a. 80  | b. 80  |
| 3. a. 60  | b. 60  |
| 4. a. 100 | b. 100 |
| 5. a. 90  | b. 90  |
| 6. a. 50  | b. 50  |
| 7. a. 20  | b. 20  |



## Day 12: Lesson 2

## Answers

1.

Actual Number		Rounded Number
61	slides to	60
64	slides to	60
72	slides to	70
79	slides to	80

2. You round a number up or down to the nearest 10.

3.

Number	Rounded To
53	50
79	80
81	80
96	100
44	40
27	30
32	30

Number	Rounded To
18	20
63	60
76	80
47	50
82	80
8	10
99	100

Have the student do the assignment for Day 12 after completing the day's lessons.



**Day 13**

Rounding numbers with 5 in the ones place is the focus today. Assist the student as necessary with this concept.

**Day 13: Lesson 2****Answers**

1. A number with 5 in the ones place will round to the larger ten.

Actual Number		Rounded Number
35	slides to	40
75	slides to	80
95	slides to	100

There are extension activities for Day 13.

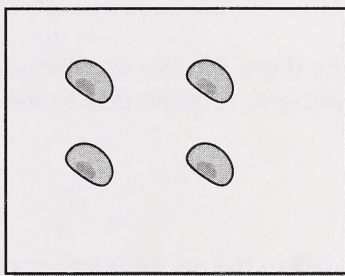
Have the student do the assignment for Day 13 after completing the day's lessons.

**Day 14**

This day reviews number concepts that lead to identifying, building, comparing, and ordering sets.

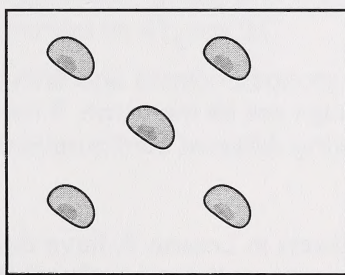
**Day 14: Lesson 1**

Put four beans on a piece of paper to look like this. Make sure the student isn't watching what you are doing.



Cover the beans. Then let the student see them for two seconds only. Ask how many beans there were on the paper. If the answer is incorrect, then show the beans and count them.

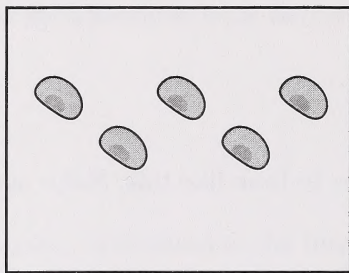
Now put five beans on the paper.



Cover them. Then let the student see them for two seconds only. Ask how many beans were on the paper this time. If the answer is incorrect, then show the beans and count them.



This time, place the five beans to look like this.



Cover them. Then let the student see them for two seconds only. Ask how many beans there are now. These are in a new pattern. Explain this to the student if the answer is wrong.

### Day 14: Lesson 2

The student should answer that there are the same number of each. With the next set, if the student says there are more white blocks, have him or her count them out. Explain that although it looks like there are more white blocks, there is the same number. It only looks like there are more because they are arranged differently. Just as there were five beans both times but in different patterns, there are still six white and six purple blocks, although in different patterns. Ensure the student understands this. This concept is called *conservation of number* (a given number does not vary, no matter how it is arranged).

### Day 14: Lesson 3

Have the student look at the three groups of dimes and then answer the questions. The student should answer that the groups are all the same. If he or she is having difficulty with this concept, repeat activities showing different configurations of items—like the beans in Lesson 1.

After the student answers the questions in Lesson 3, have the student count out and arrange the dimes the same way shown on the page. Guide the student to see how although one of the groups appears to have more dimes in it, it does not.

Repeat this activity with other manipulatives to ensure the student understands this concept.



**Day 14: Lesson 4****Answers**

1. 50
2. 82
3. 37
4. 79
5. 100
6. 16
7. 60
8. 95
9. 41
10. 22
11. 5
12. 6

**Day 15**

The student will be identifying, comparing, and ordering sets of up to 100 items. Lessons 1 and 2 are a review of grouping and skip counting.

**Day 15: Lesson 3**

In Lesson 3, the student will be building and ordering numbers. When a number is 10 less or 10 more than another one, remember to use that number. For example, 10 fewer than 51 is 41. The student builds a model on 41, not 51.

**Answers**

1. 94, 59, 34
2. 34, 59, 94
3. twenty, sixteen, eleven
4. eleven, sixteen, twenty
5. 22, 15, 11
6. 11, 15, 22

7. a. 50
- b. 19
- c. 75
- d. 84
- e. 92
- f. 39
- g. 90
- h. 96
- i. 41
- j. 47

There are extension activities for Day 15. Cut out the Number Cards in the Appendix for the activities. For Activity 2, decide whether you want the student to say ten fewer or ten more than the number on the card. You can also use five, two, seven, or any other number more or fewer than the number on the card.

Have the student do the assignment for Day 15 after completing the day's lessons.

## **Day 16**

The student builds and orders sets and explores how they are the same and different.

### **Day 16: Lesson 1**

#### **Answers**

1. 81, 78, 72
2. 72, 78, 81
3. 87, 73, 67
4. 67, 73, 87

### **Day 16: Lesson 2**

#### **Answers**

1. 88, 64, 46
2. 46, 64, 88
3. 91, 79, 19
4. 19, 79, 91

There are extension activities for Day 16.



**Day 17**

The concept of place value and the meaning of each digit in the numeral is reinforced.

**Day 17: Lesson 1****Answers**

1. a. 9 tens 2 ones  
b. 92  
c. ten  
d. ones
2. a. 7 tens 3 ones  
b. 73  
c. tens  
d. ones
3. a. 6 tens 8 ones  
b. 68  
c. tens  
d. ones

**Day 17: Lesson 2****Answers**

1. The correct order is 16, 24, 25, 60, 67, 73, 92.
2. The correct order is 100, 96, 90, 89, 83, 81, 46.

Have the student do the assignment for Day 17 after completing the day's lessons.

**Day 18**

Today is a review of the module.

**Answers**

1.

Number	Nearest Ten
89	90
75	80
62	60
97	100
46	50
51	50
34	30

- 2. 94, 85, 72, 67
- 3. 67, 72, 85, 94
- 4. tens
- 5. ones

When the student finishes the activities on Day 18, direct him or her to the Student Survey and Student Checklist in Assignment Booklet 2B. The student may work on these alone or with your help. Go over the responses and discuss them with the student. Give additional instruction as needed for any of the concepts the student has indicated he or she needs help with.

Ensure that you complete the Home Instructor's Evaluation Checklist and Home Instructor's Feedback forms for Days 10 to 18. The Home Instructor's Feedback is to give any information you think may be helpful for the teacher to know.

**Submit Assignment Booklet 2B for marking.**



## ASSIGNMENT BOOKLET 2B

Grade Two Mathematics  
Module 2: Days 10–18

### Home Instructor's Comments and Questions

\_\_\_\_\_  
Home Instructor's Signature

### FOR SCHOOL USE ONLY

Assigned Teacher:  
\_\_\_\_\_

#### Grading

Mathematics:  
\_\_\_\_\_

Neatness:  
\_\_\_\_\_

Date Assignment Booklet  
Received:  
\_\_\_\_\_

**FOR HOME INSTRUCTOR USE**  
(if label is missing or incorrect)

Student File Number:  
\_\_\_\_\_

#### Grading Scale

- A – Very Satisfactory
- B – Satisfactory
- C – Needs Attention
- D – Unsatisfactory

Apply Module Label Here

Name

Address

Postal Code

*Please verify that preprinted label is for  
correct course and module.*

### Teacher's Comments

\_\_\_\_\_  
Teacher's Signature

Home Instructor: Keep this sheet when it is returned to you as a record of the student's progress.

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- Are all the assignments completed? If not, explain why.
- Has your work been reread to be sure the spelling and details are correct?
- Is the record form filled out and the correct module label attached?

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**Send all letters in a separate envelope.**

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2. All faxing costs are the responsibility of the sender.

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**Module 2**

# **Working with Big Numbers**

Assignment Booklet 2B



Grade Two Mathematics  
Module 2: Working with Big Numbers  
Assignment Booklet 2B  
Learning Technologies Branch

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Students	✓
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1. a. Build and draw the number 99. Draw base ten rods and cubes for the number.

99

b.  tens  ones

- c. Build and draw the same number using more blocks.

d.  tens  ones

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2. a. Build and draw the number 71. Draw base ten rods and cubes for the number.

b.  tens  ones

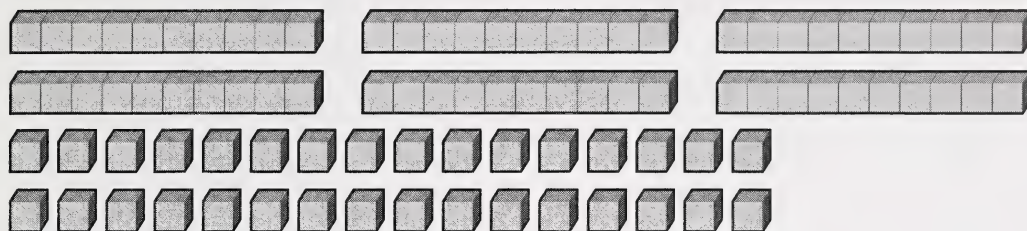
- c. Build and draw the same number using more blocks.

d.  tens  ones

---



3. a. What number is shown by these blocks?



b. Draw the number using fewer rods and cubes.

c.  tens  ones

d. Draw the number again using a different set of fewer rods and cubes.

e.  tens  ones

1. Round the numbers to the nearest ten.

a.

Number	Rounded To
33	
71	
99	
86	
57	
8	
93	
66	
49	
19	
62	

b.

Number	Rounded To
11	
54	
83	
28	
14	
77	
36	
52	
84	
23	
47	

2. What is the rule for rounding?

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1. What is the rounding rule for a number that has a 5 in the ones place?

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2. Round these numbers to the nearest ten.

a.

Number	Rounded To
65	
72	
95	
15	
37	
45	

b.

Number	Rounded To
85	
64	
75	
55	
21	
5	

3. Circle the numbers that can be rounded to 60 red.

51 62 59 65 52 55 57 63

50 61 67 68 53 64 66 54

56 58 69

4. Circle the numbers that can be rounded to 90 green.

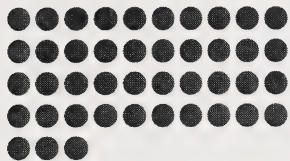
89 97 91 84 99 83 92 87

96 85 80 93 98 81 86 95

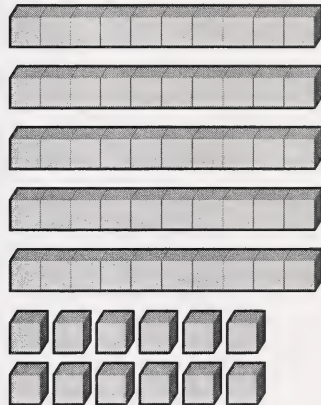
94 88 82



1. Print the number.



twelve



a.

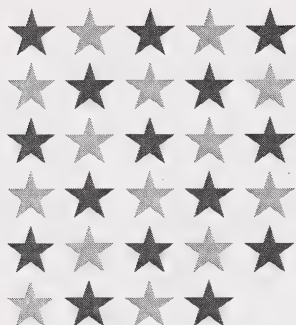
b.

c.

d. Put the numbers in order from greatest to least.

, ,

2. Print the number.



fifteen

10 fewer  
than 40

a.

b.

c.

d. Put the numbers in order from least to greatest.

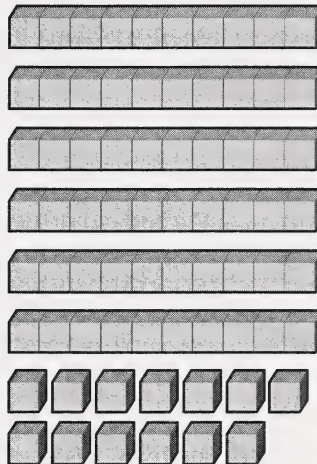
, ,



3. Write the number.

twenty

10 more  
than 70



a.

b.

c.

d. Put the numbers in order from least to greatest.

<input type="text"/>	,	<input type="text"/>	,	<input type="text"/>
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Draw a set for each number. You may use groups of items from your Math Box to help you.

1. a. 87

b. Show the number on the place-value chart.

Tens	Ones

c.  tens  ones

d. Print the number. \_\_\_\_\_

e. What does the 8 stand for? \_\_\_\_\_

f. What does the 7 stand for? \_\_\_\_\_



2. a. 71

b. Show the number on the place-value chart.

Tens	Ones

c.  tens  ones

d. Print the number. \_\_\_\_\_

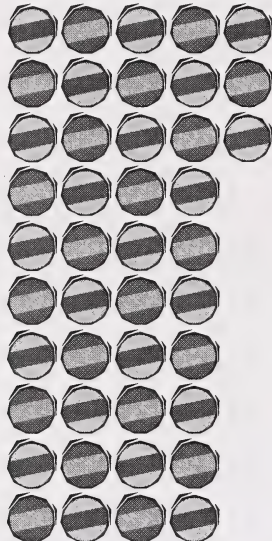
e. What does the 7 stand for? \_\_\_\_\_

f. What does the 1 stand for? \_\_\_\_\_

3. Print the proper order for these items, from the least to the greatest number.

89

10  
fewer  
than 18



10  
more  
than 60

39

71

eleven

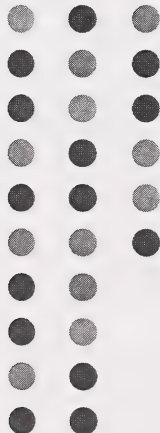







4. Print the proper order for these items, from the greatest to the least number.

eight



99

27

10  
fewer  
than 16

37

10  
more  
than 88

# **Student Survey**

## **Days 10 to 18**

Think about what you have learned in Days 10 to 18. Then answer these questions.

What did you like best about Days 10 to 18?

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List **three** things you learned in Days 10 to 18.

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Is there something you would like to know more about?

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Is there something you still need help with?

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## Student Checklist

Days 10 to 18

I know how to . . .	Put a check mark beside the things you can do.
1. represent and describe numbers to 100 in many ways	
2. use objects to show place value with numbers up to 100	
3. round numbers to the nearest ten	

## Home Instructor's Evaluation Checklist

Days 10 to 18

Specific Outcomes/ Concepts Learned  The student . . .	Has the student mastered the concept (yes or no)?
1. represents and describes numbers to 100 in many ways	
2. demonstrates, concretely and pictorially, place-value concepts to give meaning to numbers up to 100	
3. rounds numbers to the nearest ten	



## **Home Instructor's Feedback**